at Columbia University, and sitting with him for hours in the dark room harvesting plants for measuring light responses and discussing World Cup soccer and pro tennis.

What are your views on scientific journals and publishing? When it comes to scientific journals, I am essentially a romantic. I love old, venerable society journals such as Genetics or other classics, they somehow breathe history and transcend the fashions of our times. I also happen to be naively optimistic about the maxim that quality will always win. Meaning, a good paper will be recognized as such no matter whether it was published in a flashy first-tier journal or in what is euphemistically called a 'more specialized journal'. At the end of the day, the important thing is the satisfaction that comes from having produced a unit of knowledge.

Do you have a favorite paper? Yes: the 1976 paper by John White and colleagues 'The structure of the ventral nerve cord of *Caenorhabditis elegans*' (Phil. Trans. R. Soc. Lond. B *275*, 327–348.), collectively referred to as 'The Mind of the Worm'. I pick this because the determined and painstaking effort that it took to map out the nervous system and the vast scope of a project like this provides such a beautiful illustration of how human's exploratory drive has shifted from the macroscopic mapping of our outer world, meaning the voyages of the old explorers, to the mapping of the microscopic universe, the inner world of other organisms and eventually ourselves.

Your advice to a young scientist? To always keep an open mind.

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Lethal munchies

The unpredictable but dramatic mass migration of Mormon crickets in the western US has been revealed to have a macabre twist. The insects are on the move as a result of food shortages and new research suggests that some insects find their fellow marchers the perfect snack: there's cannibalism in the pack.

Mormon crickets — *Anabrus simplex* — are large flightless grasshopper-like insects and not true crickets. Millions of them sometimes march together, with dozens of insects per square metre moving up to two kilometres a day, and covering an area up to 10 kilometres long. Marching troops of the omnivorous insects can cause serious crop damage, but unlike locusts they do not devour all the plants they encounter.

Curious to see if nutrition could explain this behaviour, Stephen Simpson at the University of Sydney, studied the crickets with Greg Sword at the US Department of Agriculture's research service, and colleagues Patrick Lorch and Iain Couzin, reporting in the Proceedings of the National Academy of Sciences (published online). They placed samples of foods rich in proteins or carbohydrates on a cattle trail in the path of the marching insects.

The crickets showed a clear preference for a protein-containing food, with up to 13 crickets clambering over a four-centimetre-wide dish at once. They also went after salt.

Foraging crickets prefer protein-rich sources such as seeds, flower heads and carrion. But there is not enough to go around. They get a lot from eating each other, says Simpson. "Mormon crickets are walking packages of protein and salt," he says. Any with reduced mobility are at increased risk of another cricket stopping to eat them.

Indeed, the researchers found cannibalism to be common. When checking to see the stomach contents of marching crickets the researchers found a substantial number contained the remains of other crickets.

The crickets do not swarm every year, only when there is not enough food to go round. They evidently tolerate cannibalistic companions because of the even greater risks of going alone: one study suggests that within two days more than half of isolated insects were eaten by other animals.

Salt march: A Mormon cricket on the move seeks protein and salt and will cannibalise other individuals to find it. (Photo: copyright Darin Oswald.)